

## PRE-DISTORTION CROSS-CANCELLATION FOR LINEARIZING POWER AMPLIFIERS

### ABSTRACT OF THE DISCLOSURE

In an amplifier system having two or more different amplifier sub-systems, the input signal to at least one of the amplifier sub-systems is pre-distorted based on the combined output signal from the two or more amplifier sub-systems. In one embodiment, each other amplifier sub-system pre-distorts its input signal based on only its own output signal. In one operational scenario, during initial operations, each amplifier sub-system separately pre-distorts its input signal based on only its own output signal. After pre-distortion has settled, one of the amplifier sub-systems is switched to pre-distort its input signal based on the combined output signal, while the other amplifier sub-systems continue to pre-distort their input single based on only their own output signals.